

Quiz and Lab Task 07:

Qno:01:

(Date Class)

Create class Date with the following capabilities:

a) Output the date in multiple formats, such as

- ✓ MM/DD/YYYY
- ✓ June 14, 1992
- ✓ DDD YYYY

b) Use overloaded constructors to create Date objects initialized with dates of the formats in part (a). In the first case the constructor should receive three integer values. In the second case it should receive a String and two integer values. In the third case it should receive two integer values, the first of which represents the day number in the year.

[*Hint:* To convert the String representation of the month to a numeric value, compare Strings using the equals method. For example, if s1 and s2 are Strings, the method call s1.equals(s2) returns true if the Strings are identical and otherwise returns false.]

Qno:02:

Scenario: You're tasked with developing a simple music player application in Java. The application should support playlists, each containing multiple songs. Each song has attributes like title, artist, and duration.

Question: How would you utilize composition to model the relationship between playlists and songs in your Java application? Provide a brief outline or pseudo-code to illustrate your approach.